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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,089	04/25/2001	Donald R. Ryan	A0477-US-NP XERZ 2 01054	4959
27885	7590	02/06/2008	EXAMINER	
FAY SHARPE LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			HUNTSINGER, PETER K	
			ART UNIT	PAPER NUMBER
			2625	
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			02/06/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/841,089	RYAN ET AL.	
	Examiner	Art Unit	
	Peter K. Huntsinger	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/7/07 has been entered.

Response to Arguments

2. Applicant's arguments filed 10/5/07 have been fully considered but they are not persuasive.

The applicant argues on pages 10 and 11 of the response in essence that: Allen '299 does not disclose an integrated system for producing and finishing work pieces of a job.

a. Although the computer of Allen '299 is not directly connected to the finishing machine, the computer outputs instructions for controller the finishing machine (108 of Fig. 6, col. 7, lines 22-30, reading the finishing instructions from the computer-readable instruction sheet). Therefore, because the computer instructs the finishing machine, it can be considered to have control over the machine. Further, Allen '299 states that the computer is used to both print the document sheets and to specify details of the finishing operations which

integrated the document creation process with the finishing process (col. 7, lines 33-42).

The applicant argues on page 11 of the response in essence that:

Allen '299 does not disclose a digital production and finishing system.

b. The system of Allen '299 is clearly digital (see Fig. 1) comprising a computer, printer, and finisher. Just how a computer used by an operator is considered a digital system, a user carrying a sheet to the finisher does not prevent the system of Allen '299 from being digital. Further, it is noted that the feature upon which the applicant argues (i.e. a digital architecture of all phases of the printing and finishing process) is not recited in the rejected claims.

3. Applicant's arguments, see pages 12 and 13, filed 10/7/07, with respect to the rejection(s) of claim(s) 20 under 35 USC § 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Allen '299 and Mima '604.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6, 15-19, 21-24, 33, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Allen et al. US Patent 6,549,299.

Referring to claim 1, Allen et al. disclose an integrated and digital production and finishing system for producing and finishing work pieces of a job, comprising: a) a production device for producing the work pieces of the job (printer 14 of Fig. 1, col. 2, lines 51-53); b) a finishing device for finishing the output of the production device, such finishing device being controlled separately from the production device and having at least one constraint (finishing machine of Fig. 1, col. 2, lines 51-53); c) a production monitor controller that receives the at least one constraint from the finishing device and outputs job coordination information, based at least in part upon constraints of the finishing device (computer 12 of Fig. 1, col. 3, lines 17-26, instructions indicate various things about the tasks that are to be performed by the finishing machines); and d) a finishing module coordinator that, after receiving job coordination information output from the production monitor controller, directs operation of the finishing device (control logic of Fig. 3, col. 4, lines 29-45).

Referring to claim 2, Allen et al. disclose wherein the production device comprises a printing device and wherein the job is a print job (printer 14 of Fig. 1, col. 2, lines 51-53).

Referring to claim 3, Allen et al. disclose wherein the finishing device performs packaging operations (col. 2, lines 47-50).

Referring to claims 4 and 22, Allen et al. disclose wherein the production monitor controller outputs job coordination information comprising identity of job segments determined at least in part upon constraints of the finishing device (col. 6, lines 7-18).

Referring to claims 5 and 23, Allen et al. disclose wherein the production monitor controller outputs at least a portion of finishing job segment information prior to production of at least a portion of the job by the production device (col. 7, lines 3-13).

Referring to claims 6 and 24, Allen et al. disclose wherein the production monitor controller output comprises a job segment identifier uniquely associated with each identified job segment (barcode 38 of Fig. 2, col. 3, lines 54-61).

Referring to claims 15 and 33, Allen et al. disclose wherein the production manager controller outputs job coordination information comprising: a) identification of different job segments for differing operations of the job (col. 7, lines 6-11), b) instructions for production of each production job segment (col. 3, lines 13-15); and c) instructions for finishing of each finishing job segment (col. 4, lines 29-45).

Referring to claims 16 and 34, Allen et al. disclose wherein the production manager controller outputs further comprise: a) integrity descriptors for use by the finishing module coordinator (col. 3, lines 58-61); b) at least one virtual print job ticket (col. 3, lines 18-27); and c) at least one virtual finishing job ticket (col. 3, lines 18-27). The job tickets disclosed by Allen et al. contain printing instructions and finishing instructions. Printing two different jobs would result in two different job tickets.

Referring to claim 17, Allen et al. disclose a plurality of finishing devices (Finishing components 52 of Fig. 3, col. 4, lines 42-44) and a plurality of production

devices (col. 2, lines 55-58) wherein a plurality of finishing devices are controlled separately from each of the production devices.

Referring to claim 18, Allen et al. disclose wherein the finishing module coordinator directs operation of at least one finishing device by providing human readable instructions to human operators (col. 3, lines 30-43).

Referring to claim 19, Allen et al. disclose wherein at least some of the functions of the finishing module coordinator are performed within the same apparatus as the production manager controller device (col. 3, lines 10-12) (col. 3, lines 17-26). The control panel or the instruction sheet can be used to configure the finishing machine.

Referring to claim 21, Allen et al. disclose an integrated and digital method for coordinating the printing and finishing of a print job, comprising: a) printing job segments using a printing device (printer 14 of Fig. 1, col. 2, lines 51-53) having at least one constraint (100 of Fig. 6, col. 7, lines 3-5); b) finishing the printed job segments using a finishing device (finishing machine of Fig. 1, col. 2, lines 51-53) that is controlled separately from the printing device and having at least one constraint (110 of Fig. 6, col. 7, lines 30-32); c) outputting job coordination information from a production monitor controller (computer 12 of Fig. 1, col. 3, lines 17-26), such job coordination information being based upon the constraints of the finishing device (102 of Fig. 6, col. 7, lines 14-20); and d) directing operation of the finishing device by a finishing module coordinator (control logic of Fig. 3, col. 4, lines 29-45) after such finishing module coordinator receives job coordination information from the production monitor controller (108 of Fig. 6, col. 7, lines 22-30).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7, 8, 14, 20, 25, 26, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al. US Patent 6,549,299 as applied to claims 1 and 21 above, and further in view of Hower, Jr. et al. US Patent 5,467,434.

Referring to claims 7 and 25, Allen et al. disclose a finishing module coordinator (control logic of Fig. 3, col. 4, lines 29-45) that receives at least some job coordination information output from the production monitor controller (computer 12 of Fig. 1, col. 3, lines 17-26). Allen et al. do not disclose expressly receiving job coordination information from a virtual finishing job ticket database. Hower, Jr. et al. disclose a virtual finishing job ticket database (print queue 42 of Fig. 2, col. 4, lines 41-48) that outputs job coordination information (col. 7, lines 30-32). Allen et al. and Hower, Jr. et al. are combinable because they are from the same field of print finishing systems. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize a virtual finishing job ticket database. The motivation for doing so would have been to queue print finishing jobs so additional jobs can be handled while one job is currently printing. Therefore, it would have been obvious to combine Hower, Jr. et al. with Allen et al. to obtain the invention as specified in claim 7.

Referring to claims 8 and 26, Allen et al. disclose wherein the production monitor controller outputs job coordination information comprising: a) identity of at least one job segment determined at least in part upon constraints of the finishing device (ID of Fig. 2) and b) a job segment identifier uniquely associated with job coordination information pertaining to the job segment (ID of Fig. 2). Hower, Jr. et al. disclose wherein the virtual finishing job ticket database stores a copy of the job ticket (col. 7, lines 30-32). Because the job ticket of Allen et al. includes the job segment identifier, storing the job ticket as disclosed by Hower, Jr. et al. would incorporate storing the job segment identifier.

Referring to claims 14 and 32, Allen et al. disclose wherein the production monitor controller outputs a virtual finishing job ticket (col. 3, lines 18-27). Hower, Jr. et al. disclose storing a copy of the job ticket in the virtual finishing job ticket database (col. 7, lines 30-32).

8. Claims 9-13, and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al. US Patent 6,549,299 and Hower, Jr. et al. US Patent 5,467,434 as applied to claims 8 and 26 above, and further in view of Neilsen US Patent 6,639,687.

Referring to claims 9 and 27, Allen et al. disclose a job segment identifier and Hower, Jr. et al. disclose job coordination information stored in the virtual finishing job ticket database. Neither Allen et al. or Hower, Jr. et al. disclose expressly a job segment identifier code that forms a vector. Neilsen discloses a job segment identifier

code that is physically associated with a job segment wherein such job segment identifier code forms a vector to job coordination information, and pertaining to the job segment to which the job segment identifier code is physically associated (col. 6, lines 46-51). Allen et al. and Neilsen are combinable because they are from the same field of printing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to associate a pointer with a job segment identifier. The motivation for doing so would have been to not have to include actual data but refer to the data stored elsewhere so as to reduce the amount of memory needed. Therefore, it would have been obvious to combine Neilsen with Allen et al. to obtain the invention as specified in claims 9 and 27.

Referring to claims 10 and 28, Neilsen discloses wherein the job segment identifier code comprises recognizable text (col. 6, lines 46-51). Allen et al. disclose printing the job segment identifier on a sheet located on the job segment (col. 3, lines 27-43).

Referring to claims 11 and 29, Neilsen discloses the job segment identifier code (col. 6, lines 46-51). Allen et al. disclose printing the job segment identifier on a sheet located on the job segment (col. 3, lines 27-43).

Referring to claims 12 and 30, Allen et al. disclose wherein the job segment identifier sheet contains job coordination information pertaining to the job segment that was outputted from the production manager controller (col. 3, lines 18-27). Hower, Jr. et al. disclose storing the job ticket in the virtual finishing job ticket database (col. 7, lines 30-32).

Referring to claims 13 and 31, Allen et al. disclose a virtual finishing job ticket reader for reading information from the job segment identifier sheet (barcode reader 44 of Fig. 3, col. 4, lines 54-61).

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al. US Patent 6,549,299, and further in view of Hower, Jr. et al. US Patent 5,467,434 and Mima et al. US 2002/0101604.

Referring to claim 20, Allen et al. disclose a system for integrating and controlling assembler/finishing processes, comprising: a production monitor controller capable of separating a production job into job segments based upon the capabilities and constraints of devices to be used in the production process (computer 12 of Fig. 1, col. 3, lines 17-26); a finishing module coordinator, in communication with assembler/finisher devices (control logic of Fig. 3, col. 4, lines 29-45). Allen et al. do not disclose expressly a database for storing job segment descriptions and a database for tracking job segments.

Hower, Jr. et al. disclose at least one database for storing information concerning the capabilities and constraints of devices to be used in the production process and for storing job segment descriptions (col. 5, lines 10-21); and with at least one database, tracking job segments during the production process (print queue 42 of Fig. 2, col. 4, lines 41-48). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize printer profiles and a virtual finishing job ticket database. The motivation for doing so would have been to maintain a list of the

finishing options currently available and to queue print finishing jobs so additional jobs can be handled while one job is currently printing.

Allen '299 does not disclose expressly providing control and integrity functions of job segments.

Mima '604 discloses providing control and integrity functions of job segments (page 6, paragraphs 62-63, determines if malfunction in printer occurs and recovery action is initiated)

At the time of the invention, it would have obvious to a person of ordinary skill in the art to provide control and integrity functions of job segments. The motivation for doing so would have been to take proper corrective actions when a printer malfunctions. Therefore, it would have been obvious to combine Hower, Jr. et al. and Mima '604 with Allen et al. to obtain the invention as specified in claim 20.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter K. Huntsinger whose telephone number is (571)272-7435. The examiner can normally be reached on Monday - Friday.

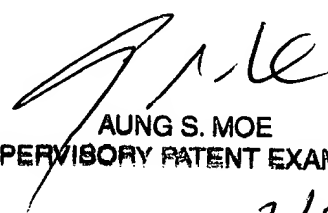
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moe Aung can be reached on (571)272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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PKH



AUNG S. MOE
SUPERVISORY PATENT EXAMINER

2/2/08